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Remarks/Arguments:

Claims 1-24 are pending in the above-identified application. Claims 1-24 were rejected.

Claims 1, 4-10, 12-15, 19-21 and 23-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Bellwood et al. and Guerinot et al. Applicant respectfully requests reconsideration of this rejection.

With regard to claim 1, neither Bellwood et al., Guerinot et al., nor their combination disclose or suggest,

> ...calculating shift parameters for the active image with respect to the video display, wherein **a method of calculation is selected from a group consisting of**:
>
> (a) **determining, within a frame**, whether pixel values of pixels in the frame and adjacent to an edge are within a predetermined intra-frame pixel value threshold;
>
> (b) (i) **identifying, within a first frame**, pixel values of pixels adjacent to an edge, (ii) **identifying, within a second frame**, pixel values of pixels having positions corresponding to the positions of pixels in the first frame and adjacent to the edge and (iii) **comparing the identified pixel values in the first frame to the corresponding identified pixel values in the second frame** to determine if a difference between the identified pixel values in the first and second frames is within a predetermined inter-frame pixel value threshold; or
>
> (c) both (a) and (b); (Emphasis added).

Basis for this amendment may be found in paragraph [0030].

Bellwood et al. does not disclose or suggest calculating shift parameters by determining, within a frame, through a frame by frame comparison or both, whether pixels values of pixels adjacent to an edge are within a predetermined threshold. Bellwood et al. detects the offset value by determining a difference between the aspect ratio of the video signal and the aspect ratio of the display. (Col. 3, lines 22-34 and Fig. 4). As shown in Fig. 4, Bellwood et al. includes a format detector 402 that receives media (F) and detects the format of the media. The format detector then provides the media to image shifter 404 along with the identified media format. Responsive to the media format being different from the screen format, image shifter 404 presents the media image offset by an offset value (Δ).

In contrast, the exemplary embodiment of Applicant's invention includes an active video detector 104 able to identify one or more parameters (i.e. pixels, lines or columns) that define the boundaries of the active image. (Para [0030]). The boundaries may be detected **within a frame**. For example, the active video detector 104 may detect inactive areas by detecting black lines and/or columns having pixel values that are within a predetermined intra-frame pixel value threshold level (e.g., 10 IRE) of black (0 IRE) across the entire active video interval of the lines and/or columns.

The boundaries may also be detected through a **frame by frame comparison** to find inactive areas in the video signal as entire lines, columns or pixels that are within a predetermined threshold from frame to frame. That is, a first frame may include pixels adjacent to an edge. The pixel values of these pixels may be identified within the first frame. A second frame may also include pixels having positions corresponding to the positions of pixels in the first frame and adjacent to the edge. The pixel values of the second frame pixels may also be identified. The identified pixel values in the first frame may then be compared to the corresponding identified pixel values in the second frame to determine if a difference between the identified pixel values in the first and second frames is within a predetermined inter-frame pixel value threshold.

This gives the present invention an advantage because it can detect boundaries of the active image when the video signal includes both the inactive portions and the active portion in the same aspect ratio. For example, a video signal of a 16x9 aspect ratio may include inactive portions which are grey colored or have a fixed pattern. The present invention can detect these inactive portions using the parameters described above. Bellwood et al. cannot detect these inactive portions because the inactive portions change the aspect ratio of the displayed image so that it is different from the aspect ratio of the active image.

Guerinot et al. teaches a television monitor that includes circuitry for causing the standard width picture to cyclically traverse the width of the display screen of the television monitor. The period of repetition of this movement is of a duration that an observer of the television is unaware of the movement of the picture. Guerinot et al. does not disclose or suggest calculating shift parameters by determining, within a frame or through a frame by frame comparison, whether pixels, lines or columns are within a predetermined threshold, as recited in claim 1.

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Because neither Bellwood et al., Guerinot et al., nor their combination disclose or suggest the features of claim 1, claim 1 is not subject to rejection under 35 U.S.C. § 103(a) in view of Bellwood et al. and Guerinot et al. Claims 4-10 depend from claim 1. Accordingly, claims 4-10 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Bellwood et al. and Guerinot et al.

With regard to claims 10, 15 and 21, these claims, while not identical to claim 1, includes features similar to those set forth above with regard to claim 1. Thus, claims 10, 15 and 21 are also not subject to rejection for the same reasons as those set forth above with regard to claim 1. Claims 12-14 depend from claim 10, claims 19-20 depend from claim 15 and claims 23-24 depend from claim 21. Accordingly, claims 12-14, 19-20 and 23-24 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Bellwood et al. and Guerinot et al.

Claims 2, 11, 16 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Bellwood et al., Guerinot et al. and Weitbruch. Bellwood et al. and Guerinot et al. are described above. Weitbruch teaches a method for automatic aspect format detection in digital video pictures. The method includes a step wherein for each possible aspect format (14:9, 16:9, 2:1) a top and/or bottom area is defined and checked for whether a black bar is present. For each possible format having black bars (14:9, 16:9 and 2:1) two areas are defined in which each pixel value is compared to a BLACKLEVEL reference value and then a black level counter is incremented for each area and each format when the pixel luminance value is **below the BLACKLEVEL reference value.** (Col. 4, lines 37-42). That is, Weitbruch determines only when a pixel is below the BLACKLEVEL (i.e 0 IRE). In contrast, the active video decoder 104 in Applicant's invention may detect pixel values that are **within a predetermined threshold**. That is, pixel values that are within a predetermined range may be detected. For example, the active video decoder 104 may detect pixels below and above 0IRE (i.e. -10IRE to +10IRE). Applicant's claimed features are advantageous over the prior art because inactive areas that are not black (i.e. grey areas) and are greater than 0IRE may be detected. Applicant's claimed features are further advantageous over the prior art because they allow for increased noise compensation.

Weitbruch does not disclose or suggest calculating shift parameters by determining, within a frame, through a frame by frame comparison or both, whether pixels, lines or columns are **within** a predetermined threshold, as recited in claims 1, 20, 15 and 21. Claims 2, 11, 16 and 22 depend from claims 1, 20, 15 and 21, respectively. Accordingly, claims 2, 11, 16 and

22 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Bellwood et al., Guerinot et al. and Weitbruch.

Claims 3 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Bellwood et al., Guerinot et al. and Yamazaki. Bellwood et al. and Guerinot et al. are described above. Yamazaki teaches a method used when a picture display section for an HDTV system displays pictures of an ordinary TV system. The method teaches illuminating blank portions on a display section where no picture is displayed at a brightness level almost equal to a picture mean luminance. This is done so that no local variations occur on the luminance due to deteriorations of fluorescent materials.

Yamazaki does not disclose or suggest calculating shift parameters by determining, within a frame or through a frame by frame comparison, whether pixels, lines or columns are within a predetermined threshold, as recited in claims 1 and 15. Claims 3 and 17 depend from claims 1 and 15, respectively. Accordingly, claims 3 and 17 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Bellwood et al., Guerinot et al. and Yamazaki.

There is no indication in the Office Action that claim 18 has been rejected. Therefore, Applicant assumes that claim 18 is allowable.

In view of the foregoing amendments and remarks, Applicant request that the Examiner reconsider and withdraw the rejection of claims 1-17 and 19-24.

Respectfully submitted,

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April 26, 2007
Patricia C. Boccella
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